



Fact Sheet

California Environmental Protection Agency



Air Resources Board

The Zero Emission Vehicle Program

Contrary to speculations, the Board did not dismantle the Regulation in 2003. It remains in place and as of 2005 is being implemented. Automakers are still obligated to demonstrate and commercialize zero emission vehicles. Since the Regulation is emissions oriented, automakers may choose which technology to use to meet the requirements; battery electric or hydrogen fuel cell vehicles.

Not only is the Regulation still in place and being implemented, many successes have come out of the Regulation. For instance, half a million Californians are driving partial zero emission vehicles or PZEVs. These vehicles have near-zero tailpipe emissions, zero evaporative emissions and an extended emissions warranty of 15 years or 150,000 miles. In fact, they are 80% cleaner than the average 2002 model year car.

In addition to the variety of PZEVs available, gas-electric hybrid vehicles are also a success. With more than 100,000 hybrids on California's roads, they give consumers a way to reduce emissions and fuel consumption. Although these "near-zero" emission vehicles provide critical pollution reductions in the near term, with the increases in California's population and in the number of miles we travel each day, we must continue to pursue pure zero emission transportation technologies.

The mission of the California Air Resources Board (Board) is to improve air quality and the Regulation is an important contributor to that goal. In order to achieve this goal, the Board is supporting a number of zero and near zero emission fuels including hydrogen, compressed natural gas, liquefied natural gas, E-85, batteries and plug-in hybrids. Hydrogen and batteries as for transportation energy have additional benefits, including energy security and the ability to use renewable sources of energy which means nearly zero emissions throughout the whole energy cycle.

Our motivation has always been to have zero emission technologies on the roads on a mass scale as soon as possible. Whether using fuel cells, battery electric vehicles, or other technologies, our commitment to zero emissions has never wavered. Our strategy, however, has appropriately considered the state of technology, market factors, economic impact, and our mission.

The Board modified the Regulation in 2003 for several reasons including a lawsuit filed against us, an assessment of zero emission vehicle credits and the need to provide manufacturers with additional flexibility. The strategy actually proved successful since:

- Considering the credits that manufacturers had banked for the more than 4,000 zero emission vehicles they had placed on the roads since 1996, there would have been a blackout of these cars between 2003 and 2009. Changing the regulation forced manufacturers to put new zero emission vehicles on California's roads during this timeframe.
- It gave California substantial emission reductions through near-zero emission vehicles such as hybrids and partial zero emission vehicles.
- The increased number of hybrids has launched battery technology into mass production. This helps to advance battery technology and hopefully lead to improved pure-battery electric vehicles and plug-in hybrids.
- It allowed us to explore other zero emission vehicle technologies and sustainable fuels, which will accelerate the transition away from petroleum.
- It gave automakers the flexibility to choose what technology to use to meet the Regulation – batteries or fuel cells.



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Having a variety of technologies and fuels to choose from is a good thing for California and the people that live and drive here. As one technology becomes more refined, others often benefit since many of the components used in advanced technology vehicles are similar. The Regulations impact on technology development and air quality is something California should be proud of and we are not alone -- nine other states have adopted the regulation and others are coming on board.

The Regulation had gone through many changes over the years and it may go through more in the future. Below is a timeline of these changes since 1990.

1990	California embarked on a plan to reduce vehicle emissions to zero through the introduction of the Zero Emission Vehicle (ZEV) Program. At that time, Board required that in 1998, 2% of the vehicles that large manufacturers produced for sale in California had to be ZEVs, increasing to 5% in 2001 and 10 percent in 2003.
1996	The ZEV mandate was adjusted to eliminate the "ramp up" years but left in place the 10 percent ZEV requirement for 2003, and in 1998 to allow partial ZEV (PZEV) credits for extremely clean vehicles that were not pure ZEVs. The underlying goal, however, never changed. California remained committed to seeing increasing numbers of ZEVs in the vehicle fleet. The challenge was determining how to reach this goal.
2001	The challenge at this time was to maintain progress towards commercialization of ZEVs, while recognizing constraints due to cost, lead-time, and technical challenges. The 2001 modifications allowed large manufacturers to meet their ZEV requirement with 2% pure ZEVs, 2% Advanced Technology PZEVs and 6% PZEVs.
2002	Due to a lawsuit filed against the Board, a federal district judge issued a preliminary injunction that prohibited the Board from enforcing the 2001 ZEV amendments with respect to the sale of new motor vehicles in model years 2003 or 2004. Once the Board adopted the 2003 Amendments to the ZEV regulation, the parties to the lawsuits agreed to end the litigation.
2003	In order to address the preliminary injunction and better align the program requirements with the status of technology development, staff proposed additional modifications to the ZEV regulation in March 2003. The reasons and benefits are described above.
2006/2007	A ZEV Technology Symposium is taking place in Sacramento on September 25,-27, 2006 to hear from industry and interested parties about the state of all ZEV technologies. In addition, an Independent Expert Review Panel has been convened to travel the world to evaluate the status of ZEV technologies. Staff will go to the Board in early 2007 with the information gathered from the Symposium as well as the report from the Independent Expert Review Panel. At that time, the Board will determine whether or not staff should come back at a later date with recommended changes to the Regulation for the 2009 and subsequent model years.

If you'd like to do your part and find out what clean cars are available today, go to www.DriveClean.ca.gov.

Where can I get more information?

Please contact the ARB toll-free at (800) END-SMOG/(800) 363-7664 (California only) or (800) 272-4572. For information on the ARB's ZEV Program, visit www.arb.ca.gov/zev. You may obtain this document in an alternative format by contacting ARB's Americans with Disabilities Act Coordinator at (916) 322-4505 (voice); (916) 324-9531 (TDD, Sacramento only); or (800) 700-8326 (TDD, outside Sacramento).